

INCIDENT TYPE:

PRESSURE POINT STANDPIPE DAMAGED
GAS VENTED INTO ATMOSPHERE

MORRISON

What happened

On the 19th April 2005 an ETM Contractor started to excavate across the carriageway for a new 800mm dia drainage connection into an existing CSO (combined sewer overflow). While removing the tarmac road surface the excavator bucket damaged a 50mm (2") valve that was connected to a 200mm intermediate pressure gas main via a standpipe approx 1.2m deep. The 50mm (2") valve was approximately 200mm below the road surface within the tarmac road construction but not in a protective grating, there were NO visible markings to indicate the position of the valve within the road formation and as a result of the damage a substantial amount of gas vented to atmosphere.

What actions were taken

The site team immediately contacted Transco who advised them to close the road and ensure everyone stay well away from the pipe until Transco operatives reached the site and gave further advise. The Emergency Services attended the scene, the police and fire service set up road closures – Transco repaired the pipe approx 18:00hrs, 6.5 hrs after it was damaged.

What was the cause

The 50mm (2") valve located at the top of the standpipe was not indicated on the Transco drawings sent to ETM at the design stage. Trial holes dug at the design / feasibility stage identified the position of the gas main, but not the 'pressure point' standpipes. There were no visible markings on the carriageway to indicate the presence of a 50mm (2") valve in this location – typically, utility providers with equipment and valves near the surface house their equipment inside a surface chamber with a suitable cover for access and maintainance by the provider – there was no evidence of a cover and supporting brickwork. The top section of the standpipe, the 50mm (2") valve was in the tarmac sub-base of the road construction at approx 200mm deep.

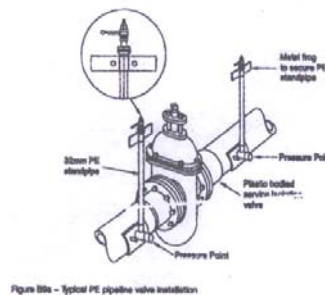


Figure 816 – Typical PE pipeline valve installation



Lessons for the group

From discussions with the HSE and Transco it is evident the pressure point valve configuration is common on all Gas Transco networks – old and new.

Based on this information we should assume there will always be **two** pressure points (one either side of a valve chamber) but not necessarily equally spaced from the valve. In certain circumstances Transco place two pressure points either side of the valve, making **four** pressure points in total.

For current / future works near Transco apparatus we must consider and satisfy ourselves we know whether or not 'pressure points' standpipes exist and if they do, we are aware of there location in respect to our works.

When requesting information from Transco at design / feasibility stages we should specifically ask for all the details on associated apparatus including 'pressure point' locations and the pipeline (classification) / operating pressure.

At the specified time period (3-7 days depending on region) before starting excavation work near Transco pipelines we must inform Transco of our scope of works – thereby giving their representatives ample opportunity to attend site. Date, time and name of person taking call must be formally recorded in site diary's etc – the permit to excavate form will be modified to include a prompt to ensure the necessary notification call to the statutory providers has been made and recorded.

GE 700 – E2:Burried services

Mechanical excavators and power tools should not be used within **0.5 metres** of the indicated line of service, unless prior agreement on a safe system of work has been reached with the service owner.